

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions of claims in the application:

Listing of Claims:

1. (Currently Amended) A system for providing a single telephone number for use with a digital cordless handset and with a second handset, the system comprising:
a wireless access point wired to a wired data network that provides voice and data services, the wireless access point having a means for communicating with the digital cordless handset via a wireless connection to provide wireless access to the wired data network for the digital cordless handset; and
a media gateway having,
means for interfacing with a data switch, the data switch including programming means to respond to a routing information in a layer of a switching protocol to route data packets to the at least one of the digital cordless handset and the second handset,
means for enabling the wireless access point to generate a ring tone at the digital cordless handset, wherein a call directed toward the second handset corresponding to a single telephone number on a telecommunications network is received at the media gateway, the telecommunications network generating a ring tone corresponding to the call at the second handset, and
means for linking the telecommunications network to the wired data network, wherein the digital cordless handset and the second handset, using the telecommunications network are assigned the single telephone number.
2. (Canceled)
3. (Previously Presented) The system of Claim 1, wherein the ring tone is: generated substantially simultaneously at the digital cordless handset and the second handset.

4. (Previously Presented) The system of Claim 1, wherein the telecommunications network comprises a public switched telephone network.

5. (Previously Presented) The system of Claim 4, wherein the second handset comprises at least one wired handset connected to the public switched telephone network.

6. (Previously Presented) The system of Claim 1, wherein the telecommunications network comprises a wireless telecommunications network comprising means for providing wireless telecommunications on wireless communications frequencies.

7. (Previously Presented) The system of Claim 6, wherein the second handset comprises means for communicating with the wireless telecommunications network via the wireless communications frequencies.

8. (Currently Amended) A method for providing a single telephone number for use with a plurality of handsets, the method comprising:

assigning a single telephone number to a first handset using a first telecommunications network, wherein the first telecommunications network comprises one or more wireless access points wired to a wired data network, wherein the wired data network provides voice and data services;

assigning the single telephone number to a second handset using a second telecommunications network;

providing wireless access to the wired data network via the wireless access points ~~to the wired data network~~ for the first handset over a wireless connection; and

enabling a media gateway to receive a call directed toward the second handset corresponding to the single telephone number on the second telecommunications network, the media gateway interfacing with a data switch for routing information in a layer of a switching protocol to at least one of the first handset and the second handset, the media gateway enabling one of the wireless access points to generate a ring tone at the first handset, the second telecommunications network generating a ring tone corresponding to the call at the

second handset, the media gateway linking the second telecommunications network to the wired data network.

9. (Original) The method of Claim 8, further comprising:
detecting an incoming communication from a calling party to the single telephone number;
and
in response to detection of the incoming communication, placing outgoing communications to the first handset and the second handset.

10. (Original) The method of Claim 9, further comprising: connecting the incoming communication to the first handset: to be answered of either the first handset or the second handset.

11. (Original) The method of Claim 10, further comprising:
dropping each of the outgoing communications other than the outgoing communication associated with the first handset to be answered.

12. (Canceled)

13. (Previously Presented) The method of Claim 8, wherein the first handset comprises a digital cordless handset for communicating with the one or more wireless access points via the wireless connection.

14. (Previously Presented) The method of Claim 8, wherein the second network comprises a wireless network providing wireless telecommunications on wireless communications frequencies.

15. (Previously Presented) The method of Claim 14, wherein the second handset comprises a wireless device communicating with the wireless network via the wireless communications frequencies.

16. (Previously Presented) The method of Claim 8, wherein the second network comprises a public switched telephone network.

17, (Previously Presented) The method of Claim 16, wherein the second handset comprises a wired handset connected to the public switched telephone network.

18-26. (Canceled)

27, (Currently Amended) A system for providing a single telephone number for use with a digital cordless handset and with a second handset, the system comprising:

means for receiving an incoming call directed to a telephone number, wherein the telephone number is assigned to the digital cordless handset and the second handset;

means for routing the incoming call to the digital cordless handset, wherein the digital cordless handset communicates via a wireless connection with a wireless access point wired to a wired data network for wireless access to the wired data network, wherein the wired data network provides voice and data services;

means for routing the incoming call to the second handset, wherein the second handset communicates with a telecommunications network; and

means for enabling a media gateway to receive a call directed toward the second handset corresponding to the telephone number on the telecommunications network, the media gateway interfacing with a data switch for routing information in a layer of a switching protocol to at least one of the digital cordless handset and the second handset, the media gateway enabling the wireless access point to generate a ring tone at the digital cordless handset, the telecommunications network generating a ring tone corresponding to the call at the digital cordless handset, the media gateway linking the telecommunications network to the wired data network.

28. (Previously Presented) The system of claim 27, further comprising:

means for placing outgoing calls to the digital cordless handset and the second handset, in response to receiving the incoming call directed to the telephone number; and

means for connecting the incoming call to the digital cordless handset to be answered of either the digital cordless handset or the second handset.

29. (Previously Presented) The system of claim 27 28, further comprising means for dropping the outgoing communication other than the outgoing communication associated with the digital cordless handset to be answered.

30. (Previously Presented) The system of claim 1, wherein the means for communicating provides voice-over-internet protocol (VOIP) service to the digital cordless handset.

31. (Previously Presented) The system of claim 1, wherein the means for communicating is wired to the wired data network through a broadband residential gateway comprising a broadband modem and a router, the broadband residential gateway comprises means for enabling being configured to enable another means for communicating to connect to the wired data network.

32. (Previously Presented) The system of claim 1, wherein the means for communicating uses subscriber identity module SIM information from the digital cordless handset to determine if a user associated with the digital cordless handset is a subscriber to the wired data network.

33. (Previously Presented) The system of claim 1, wherein the wireless connection comprises an unregulated wireless connection.

34. (Previously Presented) The system of claim 33, wherein the unregulated wireless connection comprises a connection providing wireless service using at least one frequency not assigned to a service provider.

35. (Previously Presented) The method of claim 8., wherein the wireless connection comprises an unregulated wireless connection.

36. (Previously Presented) The method of claim 35, wherein the unregulated wireless connection comprises a connection providing wireless service using at least one frequency not assigned to a service provider.

37-38. (Canceled)

39. (Previously Presented) The system of claim 27, wherein the wireless, connection comprises an unregulated wireless connection.

40. (Previously Presented) The system of claim 39, wherein the unregulated wireless connection comprises a. connection providing service using at least one frequencies not assigned to any service provider.

41. (Previously Presented) The system of claim 6, wherein the wireless communications frequencies comprise regulated wireless communications frequencies.

42. (Previously Presented) The system of claim 41, wherein the regulated wireless communications frequencies comprise frequencies assigned to a service provider.

43. (Previously Presented) The method of claim 14, wherein the wireless communications frequencies comprise regulated wireless communications frequencies.

44. (Previously Presented) The method of claim 43, wherein the regulated wireless communications frequencies comprise frequencies assigned to a service provider.

45-46. (Canceled)

47. (Currently Amended) A media gateway comprising:
means for enabling a wireless access point to generate a ring tone at a digital cordless handset;

means for interfacing with a data switch for routing information in a layer of a switching protocol to at least one of a first handset and a second handset,

means for linking a telecommunications network to a wired data network, the telecommunications network generating a ring tone corresponding to a call at the second handset wherein the digital cordless handset and the second handset using the telecommunications network are assigned a single telephone number, the wireless access point being wired to the wired data network, the wireless access point communicating with the digital cordless handset via a wireless connection to provide wireless access to the wired data network for the digital cordless handset, wherein the wired data network provides voice and data services; and

means for receiving the call directed toward the second handset corresponding to the single telephone number on the telecommunications network.

48. (Previously Presented) The media gateway of Claim 47, wherein the ring tone is generated substantially simultaneously at the digital cordless handset and the second handset.

49. (Previously Presented) The media gateway of Claim 47, wherein the telecommunications network comprises a public switched telephone network.

50. (Previously Presented) The media gateway of Claim 49, wherein the second handset comprises a wired handset connected to the public switched telephone network.

51. (Previously Presented) The media gateway of Claim 47, wherein the telecommunications network comprises a wireless telecommunications network providing wireless telecommunications on wireless communications frequencies.

52. (Previously Presented) The media gateway of Claim 51, wherein the second handset comprises a wireless device communicating with the wireless telecommunications network via the wireless communications frequencies.

53. (Previously Presented) The media gateway of claim 47, wherein the wireless access point provides voice-over-internet protocol (VOIP) service to the digital cordless handset.

54. (Previously Presented) The media gateway of claim 47, wherein the wireless access point is wired to the wired data network through a broadband residential gateway comprising a broadband modem and a router, the broadband residential gateway enabling another wireless access point to connect to the wired data network.

55. (Previously Presented) The media gateway of claim 47, wherein the wireless access point uses subscriber identity module SIM information from the digital cordless handset to determine if a user associated with the digital cordless handset is a subscriber to the wired data network.

56. (Previously Presented) The media gateway of claim 47, wherein the wireless connection comprises an unregulated wireless connection.

57. (Previously Presented) The media gateway of claim 56, wherein the unregulated wireless connection comprises a connection providing wireless service using at least one frequency not assigned to a service provider.

58. (Previously Presented) The system of claim 1, wherein the data switch comprises a signal transfer point (SIP).